



PAINE FIELD AIRPORT MASTER PLAN

Snohomish County

11/19/20

Master Plan Project Initiation Meeting – Airport Commission Presentation





Agenda

- Introductions
- FAA Grant Assurances
- Purpose of a Master Plan
- What makes a Successful Master Plan
- Components of a Master Plan
- Funding Master Plan Projects



What are FAA Grant Assurances?

- When airport owners or sponsors accept funds from FAA-administered airport financial assistance programs, they must agree to certain obligations or ***assurances***.
- The duration of these obligations depends on the type of recipient, the useful life of the facility being developed, and other conditions stipulated in the assurances.





What is an Airport Master Plan?

An expression of the facilities required at a future time to satisfy demand at a given level of service within certain constraints



Comprehensive study of an airport and describes the short, medium, and long-term development plans to meet future aviation demand.

*Serves as the strategy for the development of the airport and provides a **road map** to meet the future aviation demand while preserving the flexibility to respond to the changing and dynamic aviation industry conditions.*



Establish a Vision for the Master Plan

Vision

A concise and focused statement, typically defining the role of the airport in the local and regional transportation network, reflecting local and regional values

Goals

Specific statements expanding upon the defined vision to guide future airport development

Objectives

Identifies the specific items that would be important to achieve; the best objectives are measurable using established criteria



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Example Statements - Terminal

Goal

- *Develop passenger terminal to efficiently accommodate passenger planning activity levels to enhance user satisfaction*

Objectives

- *Ensure a positive passenger experience from access point to the curbside through security and to the gate*
- *Maintain a high level of service on the curbfront, security checkpoints, and passenger holdrooms*
- *Minimize walking distance from curbside to aircraft gate*



What are Typical Outcomes of a Master Plan?

- 1** Documentation of the issues
- 2** Justification of the proposed development
- 3** Effective graphic presentation of the development program
- 4** Realistic implementation schedule
- 5** Achievable financial plan
- 6** Plan that address local, state and federal issues
- 7** Project definition for environmental issues
- 8** Framework for future planning



What Makes a Successful Master Plan?

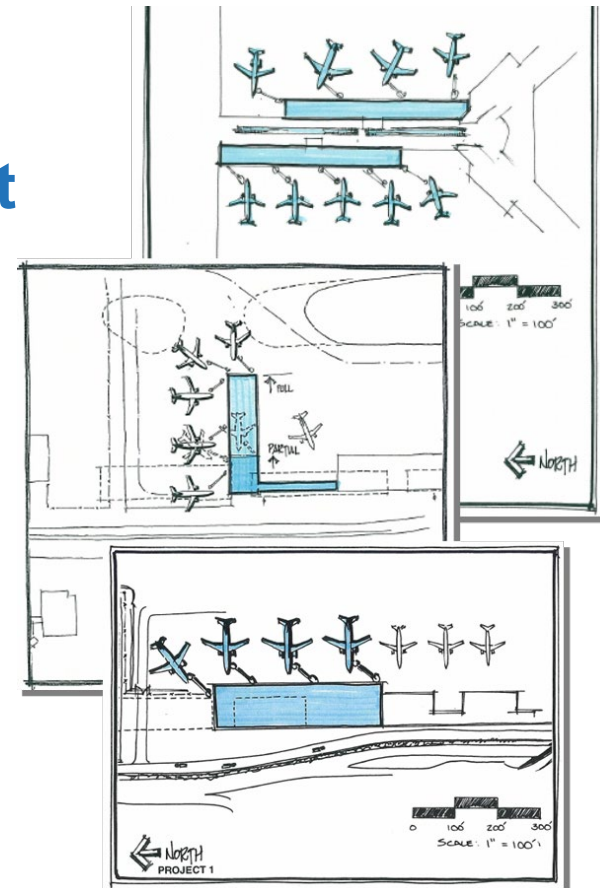
1. Balanced
2. Creative & Visionary
3. Environmentally Compatible & Sustainably Responsible
4. Financially Feasible
5. Flexible
6. Responsive
7. Supported by Key Stakeholders
8. Technically Sound



What are the Deliverables of a Master Plan?

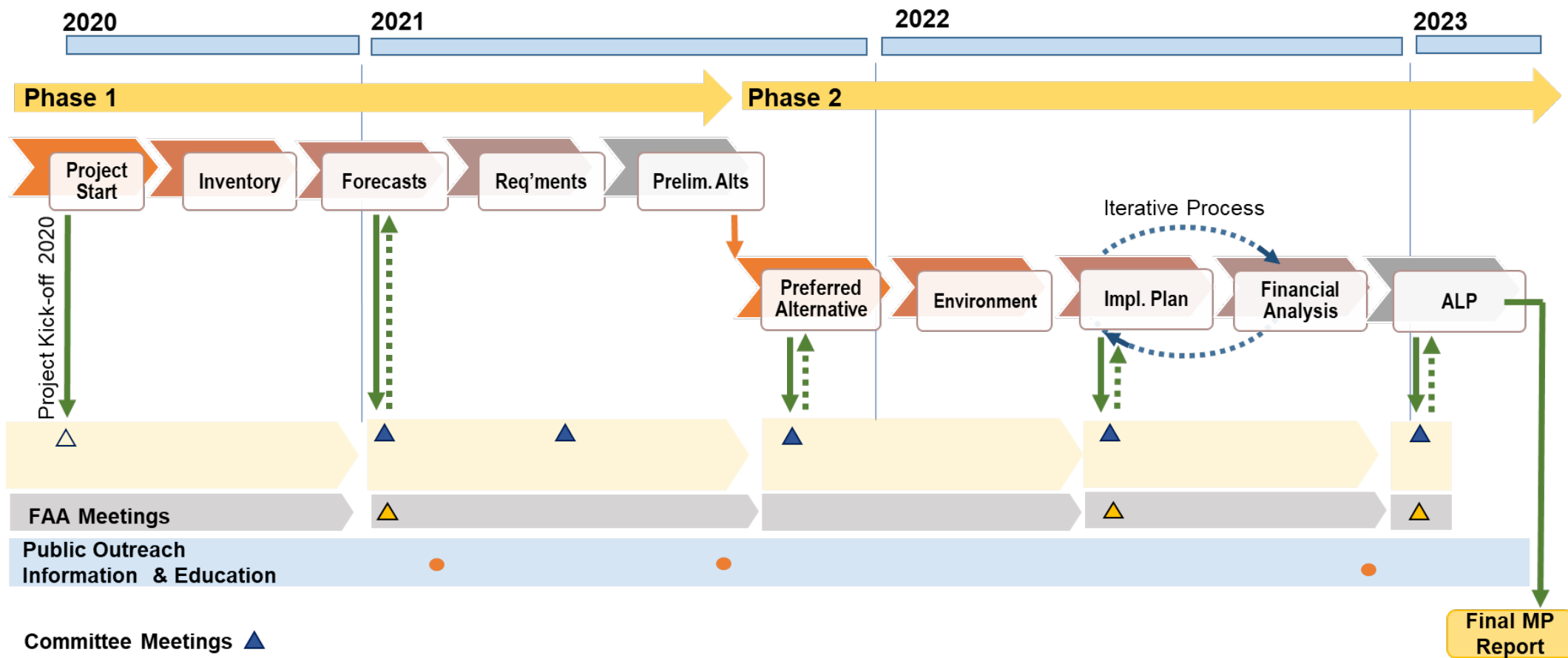
Final deliverables will vary between each Airport Master Plan. Usually depends on funding sources and airport preference

- **A Technical Report**
- **An Airport Layout Plan Drawing Set**
- **An Executive Summary Report**





Example of a Master Plan Process & Duration

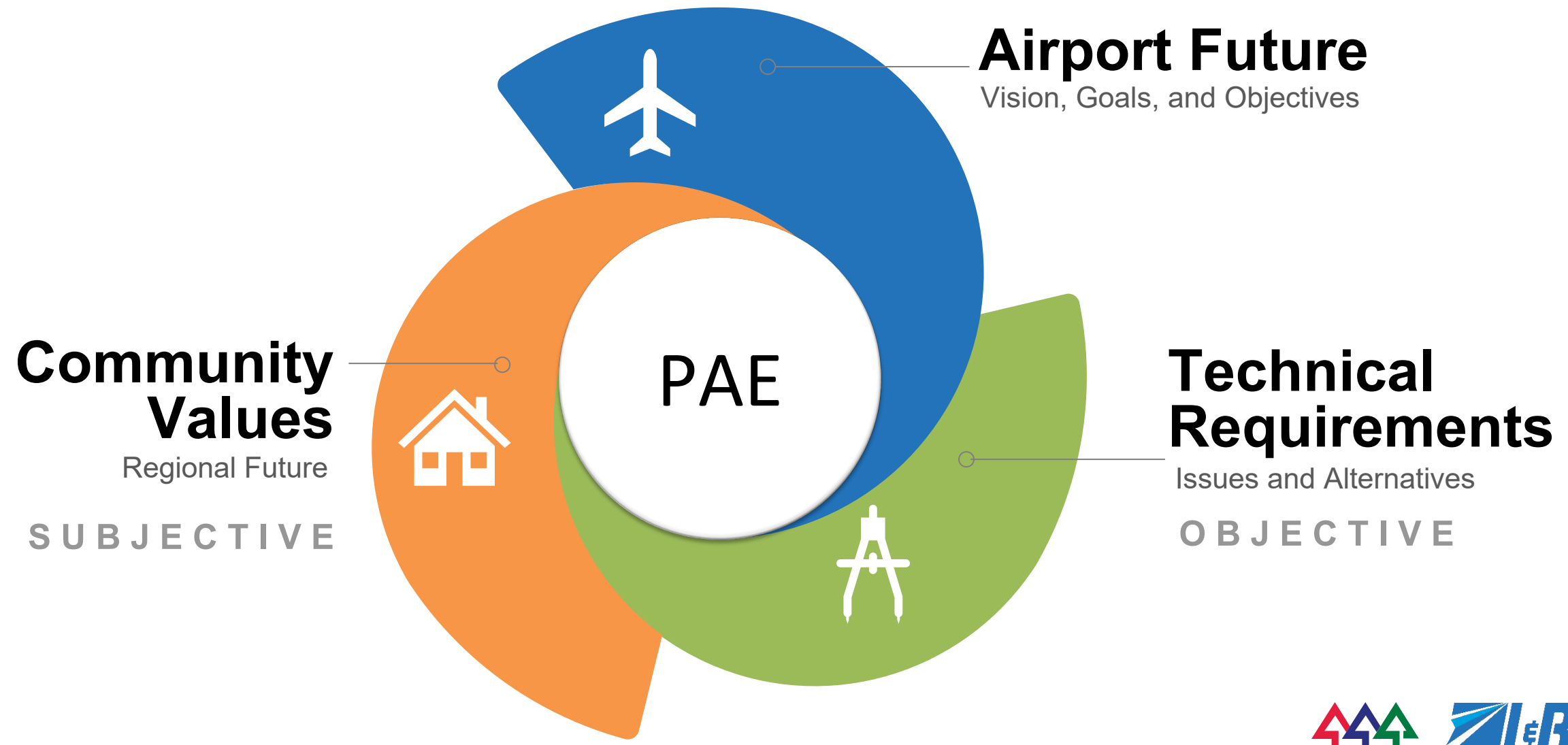




What are the Major Components of a Master Plan?

- Stakeholder Involvement
- Existing Conditions/Inventory
- Aviation Forecasts
- Facility Requirements
- Alternatives Development and Evaluation
- Environmental Considerations
- Facilities Implementation Plan
- Land Use Plan
- Airport Layout Plans
- Financial Feasibility Analysis

Airport Community Relationship





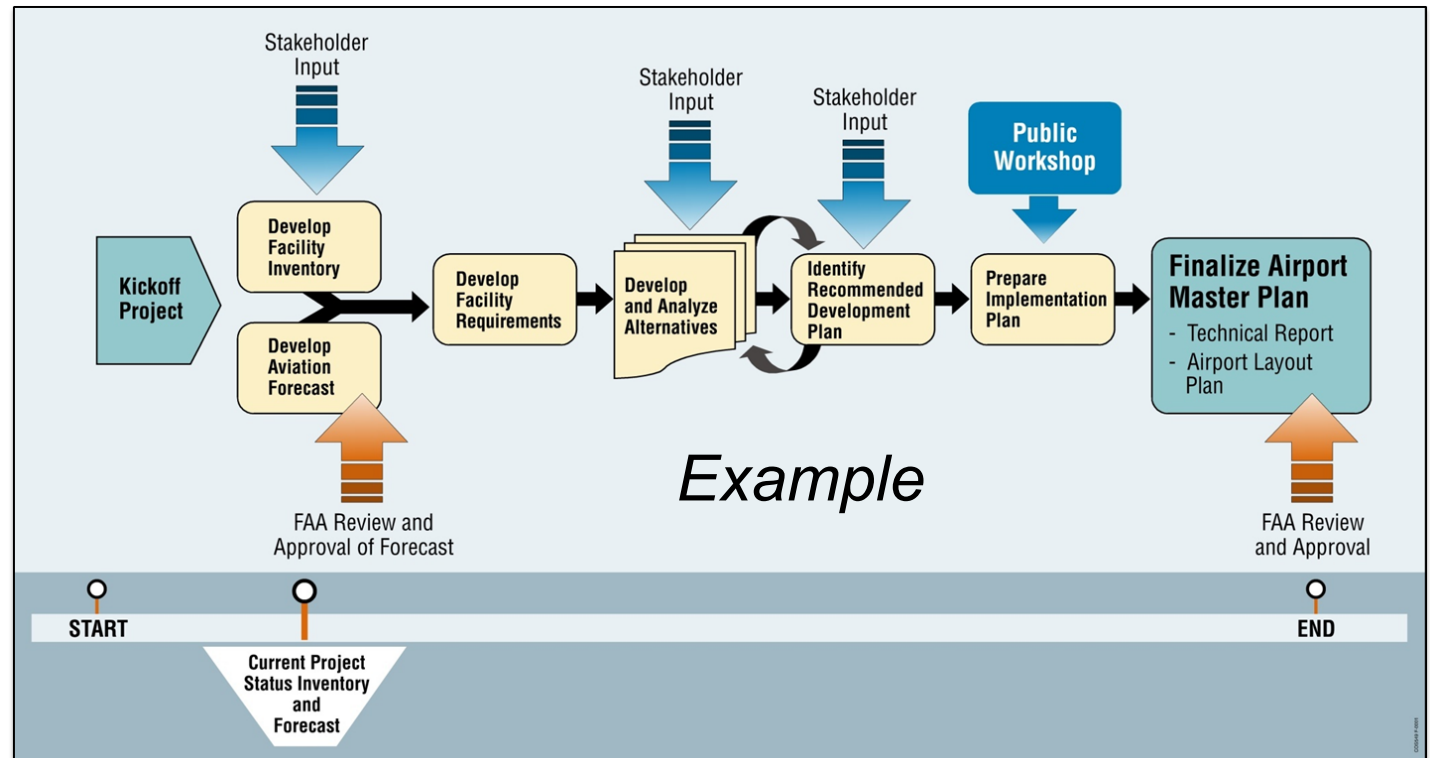
Who Participates in a Master Plan?

- Airlines and Tenants
 - Airport Sponsor
 - FAA
 - Airport Commission
 - Public and Community Group
 - Planning Agencies
 - Area Business Leaders
 - State & Local Agencies
-
- Key project decisions made at several points along the Master Plan Study
 - The **Airport Sponsor** and **FAA** are the ultimate decision makers



Public and Stakeholder Involvement – When?

- Involves Open houses, workshops, websites, social media to the broader public at various points in the process





FAA Involvement

Coordination

Coordination between PAE and FAA happens at the FAA Airport District Office (ADO) level



Approval

The regional ADO is responsible for reviewing & approving the Forecast and ALP.



FAA Involvement

The extent of FAA Involvement is closely related to how the Master Plan is funded

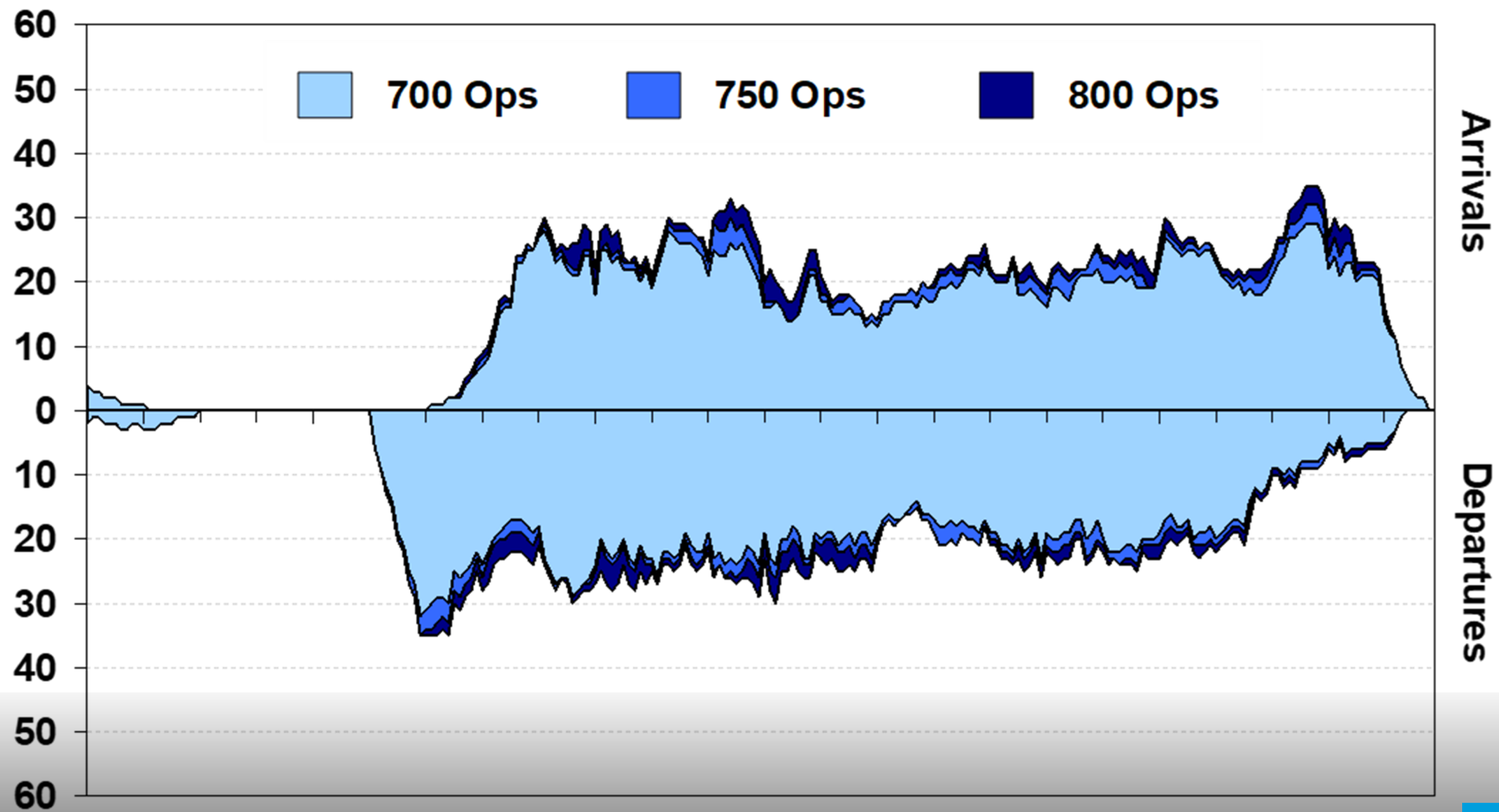




Existing Conditions/Inventory

Data Collection; Inventory of pertinent data for use in subsequent plan elements.





Aviation Forecast

Forecasts of aeronautical demand for short, medium, and long-term time frames.





Facility Requirements

Identify the demand levels that will trigger the need for facility additions or improvements and estimate the extent of new facilities that may be required to meet that demand.



Airfield Facility Requirements

Runways , Taxiways, Aprons, FAA Safety Areas, FAA Geometry Standards, Wind Coverage, Deicing





Terminal Facility Requirements

Passenger Areas, Baggage, Security, Gate Demand, Gate Size, Jet Bridges, Meeter/Greeters





Support Facilities Facility Requirements

ATCT, ARFF, Airport Maintenance, MRO, Cargo, Catering, General Aviation, GSE, Administration, Police



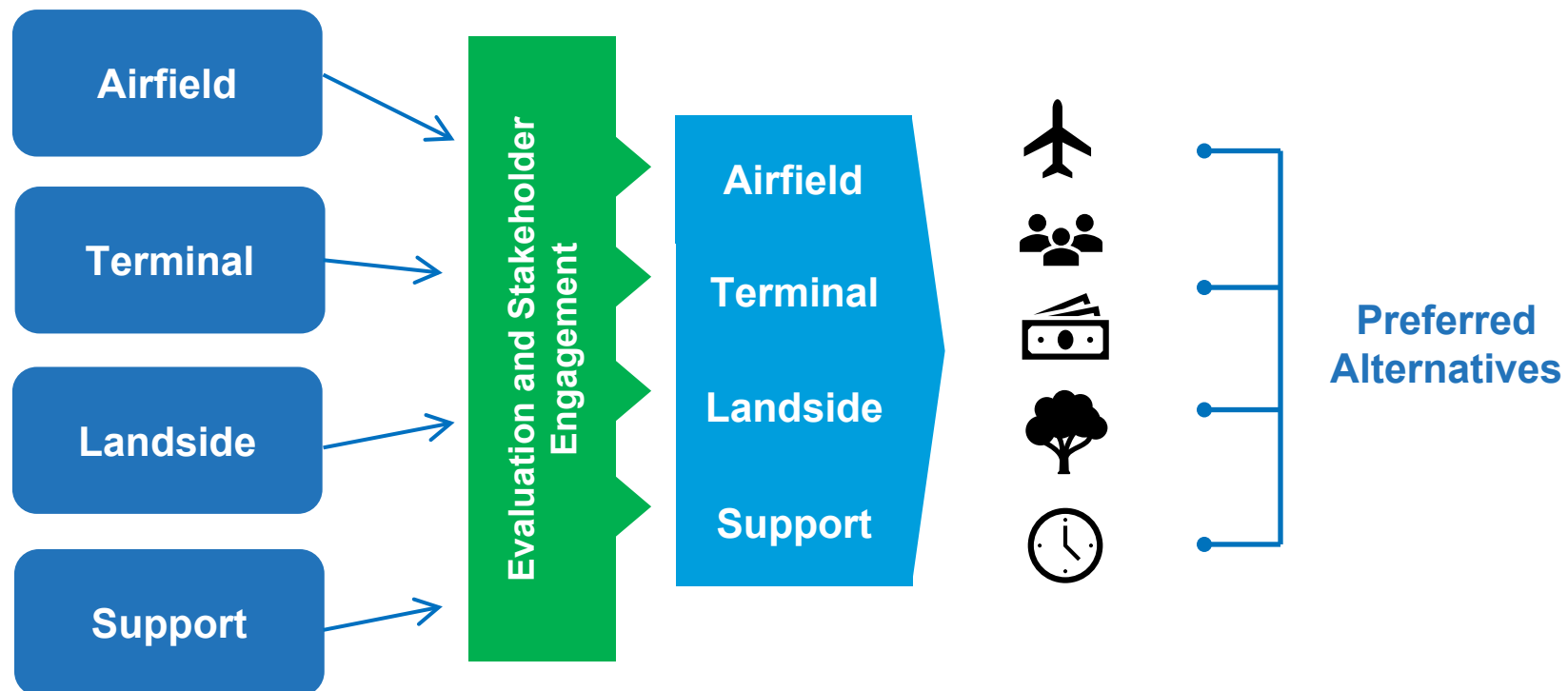
Landside Facility Requirements

Parking, Terminal Curbside, Access Road, Terminal Roads, Commercial Vehicles, Shuttles, Public Transportation



Alternatives Development and Evaluation

Identify options to meet projected facility requirements and alternative configurations for each major component.





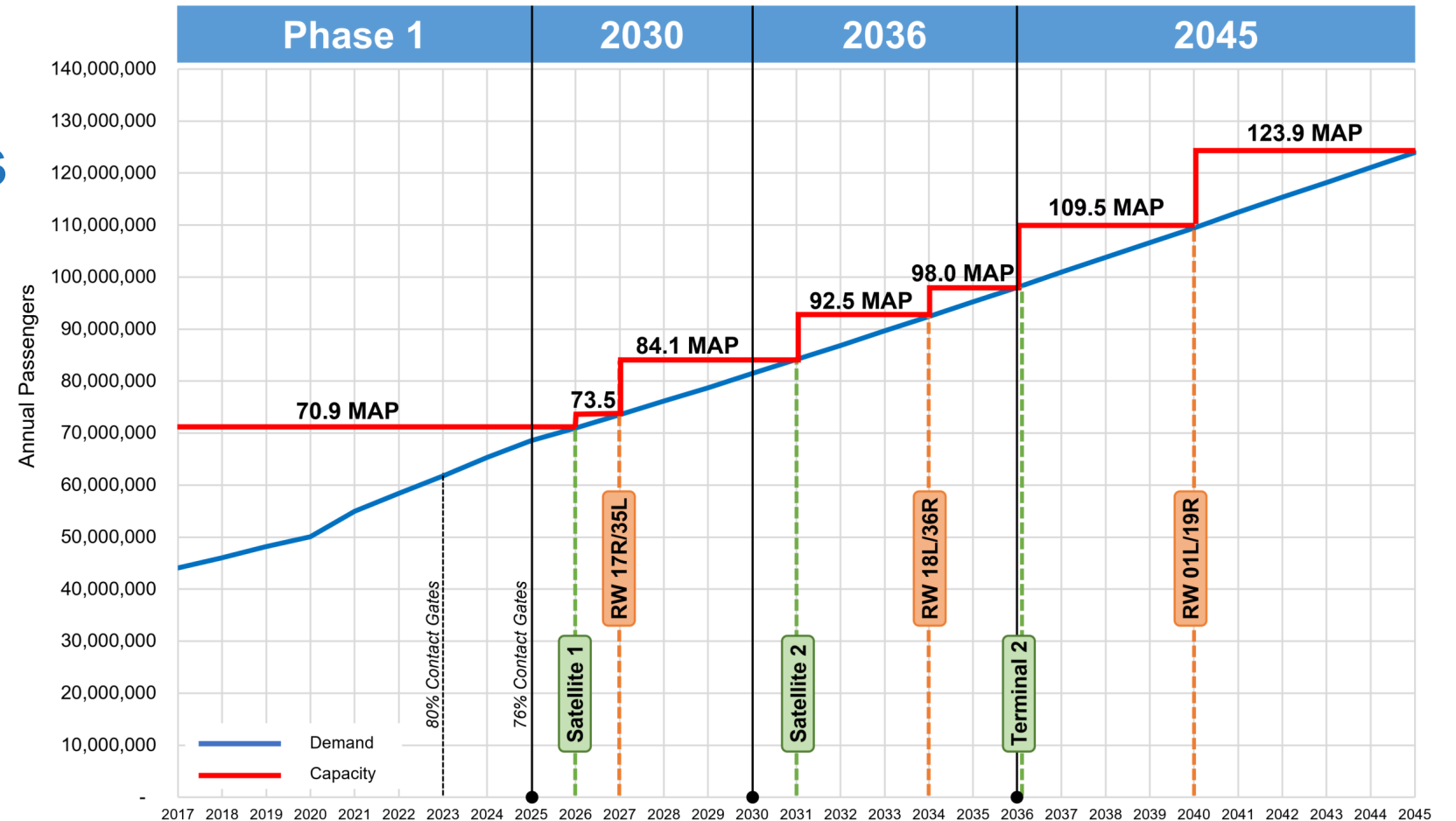
- Air Quality
- Biological Resources
- Historic, Architectural, Archaeological, and Cultural Resources
- Natural Resources and Energy Supply
- Noise
- Wetlands
- Stormwater
- Floodplains and Rivers

Environmental Considerations

A clear understanding of the environmental requirements needed to move forward with each project in the recommended development program.



Project Triggers & Timelines



Facilities Implementation Plan

The plan will be based upon triggers, both demand-based (i.e. passengers, operations, etc....) and upon the availability of capital of which drives the timing of airport facility development projects.



Capital Projects



Facilities Implementation Plan

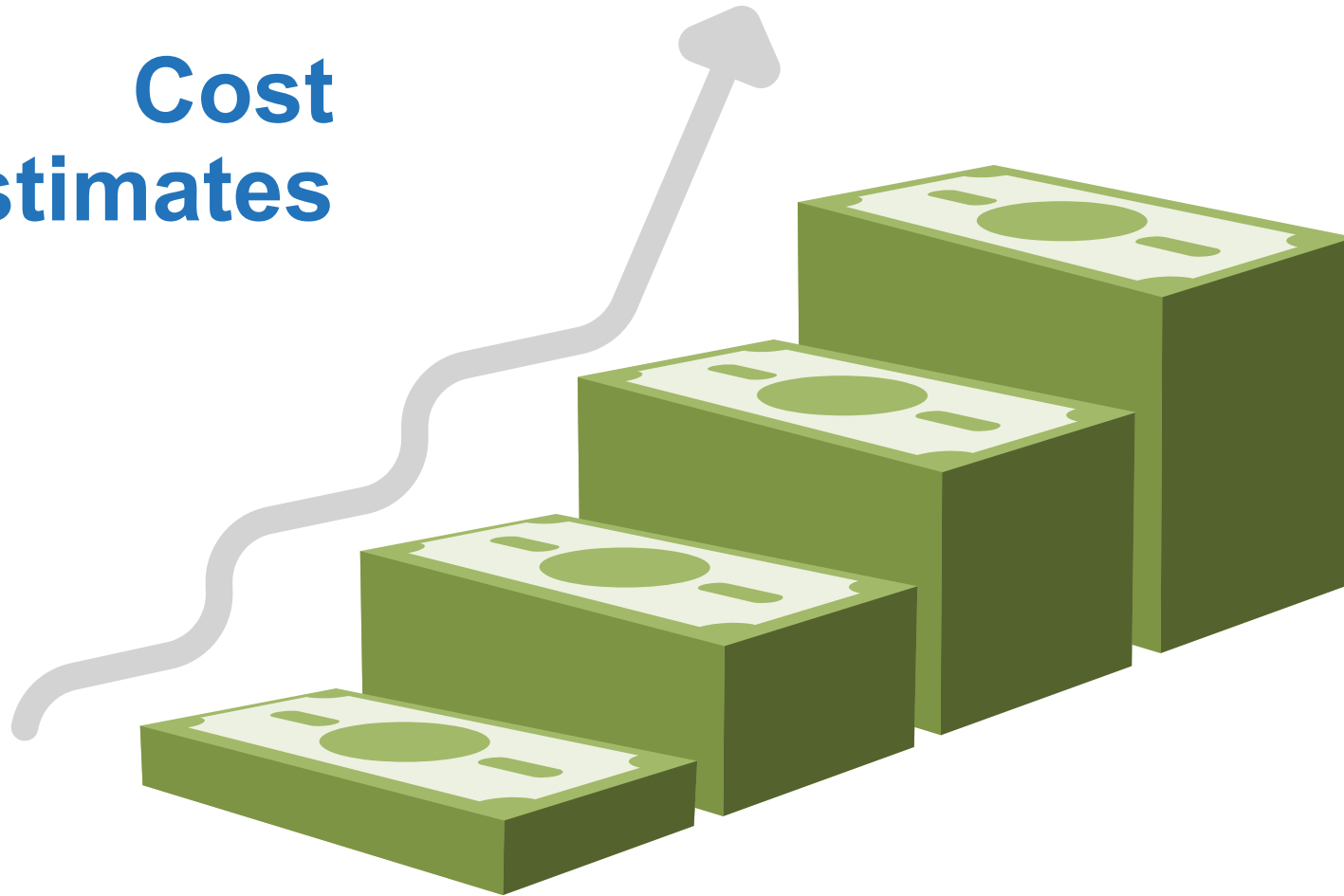
A key output of the Master Plan is the Capital Investment Plan (CIP), which the County can utilize to plan, prioritize and allocate funding for the improvements in the short-term as well as the 20-year planning horizon at PAE.



Facilities Implementation Plan

The implementation plan will include high-level Rough Order of Magnitude (ROM) costs for the future projects, including the timing of these costs to help the county understand the financial implications of the Master Plan

Cost Estimates





Land Use Plan

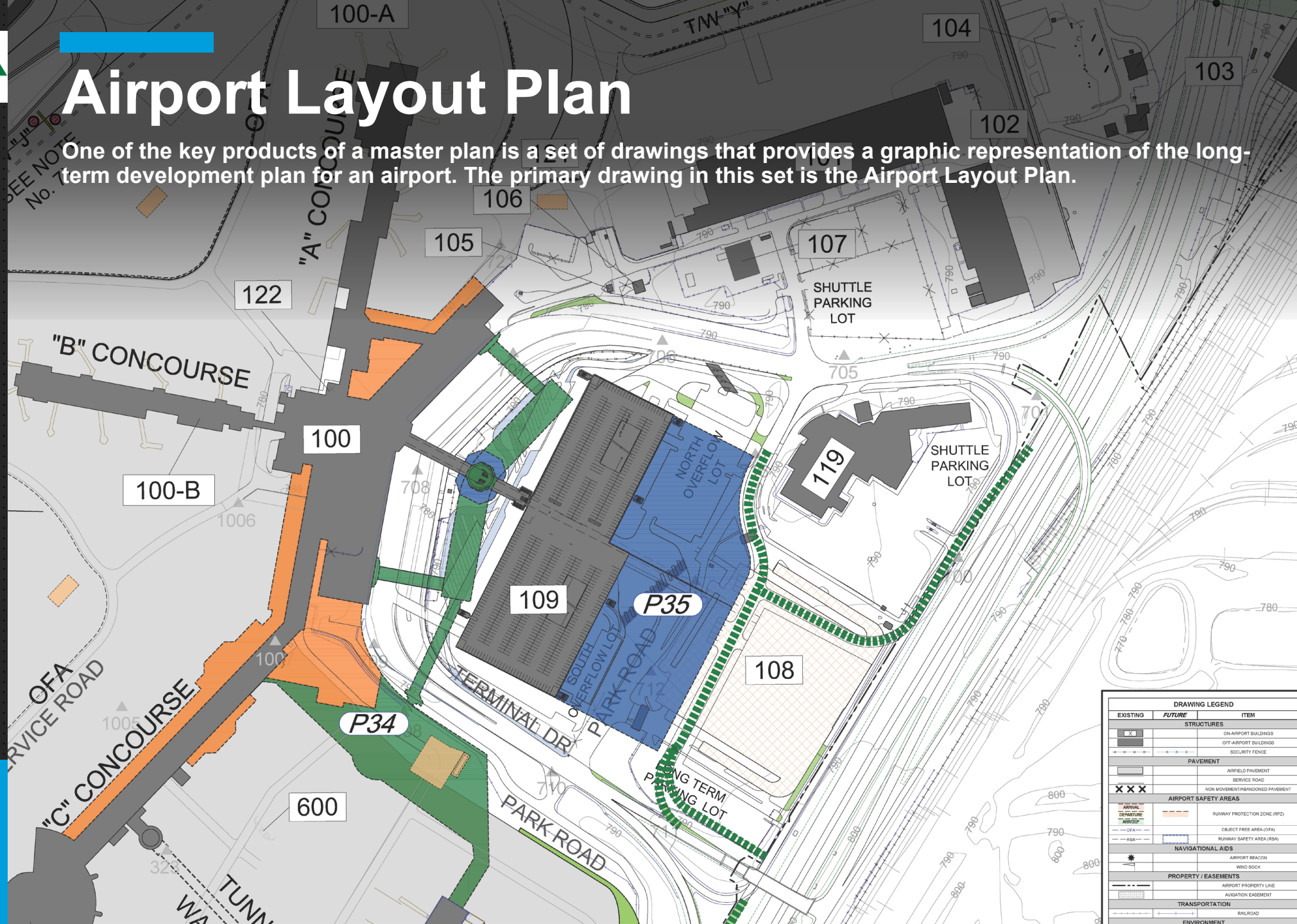
The purpose of developing an on/off-airport land use plan is to achieve an arrangement of land uses within the airport's boundary that best utilizes available property for existing and future airport needs; it should also be compatible with the surrounding environment.





Airport Layout Plan

One of the key products of a master plan is a set of drawings that provides a graphic representation of the long-term development plan for an airport. The primary drawing in this set is the Airport Layout Plan.



NO.	FACILITY	TOP ELEV (MSL)
100	Passenger Terminal	841.2
101	A Concourse	-
102	B Concourse	-
103	C Concourse	-
104	D Concourse	-
105	Primary Hangar	854.8
106	Secondary Hangar	831.5
107	DPC Electrical Vault MS-1 / EV-0	802.3
108	BP Fuel Farm	798.8
109	East Ohio Gas emergency shutoff	801.9
110	Pump House-2	800.1
111	CFO Bomb Squad Facility	812.7
112	Long Term Extended Parking	829.0
113	Short Term Parking	844.5
114	RWY 6L ALSF Equipment Building	-
115	RWY 24L MALS SR Equipment Building	-
116	RWY 6L LOC Equipment Building	-
117	RWY 6L LOC Offset Equipment Building	-
118	RWY 24L MALS SR Equipment Building	802.6
119	RWY 24L CS & Offset CS Equipment Building	-
120	Pump House-1	802.5
121	Shawton Hopkins Hotel	891.5
122	RTA Maintenance Facility	-
123	City Incinerator	799.2
124	FAA Air Traffic Control Tower (ATCT)	993.0
125	Centralized Design Facility	-
201	ARFF	806.7
202	EV-9	802.7
203	Parker Hannifan	-
204	DPC 5-Points Garage/Hazmat	808.8
205	DPC Central Receiving	808.1
206	DPC Engineering	804.4
207	LSG / Sky Chef's	807.0
208	ServiceAir	807.7
209	ASIS/Agee Ground Fuel Storage	-
210	ASIS Maintenance	803.0
211	Air Services Hangar (South)	833.7
212	Continental Hangar-2	852.9
213	Continental Hangar-1	860.9
214	Continental Training Center (CTC)	807.9
215	Key Corp Hangar	807.8
216	Cargo Building (North)	819.9
217	Cargo Building (South)	811.4
218	Chelco Catering	825.0
219	Continental Vehicle Maintenance	822.1
220	USPS Mail Facility	812.6
221	Frederix Express	812.0
222	Good Recovery Tanks and Support Building	-
223	Electrical Vault MS-2	-
224	Continental Hangar-3	855.0
301	X Jet Center	857.5
302	X Jet Fuel Farm	812.1
303	DPC Snow Ram	808.8
304	CFO / FBI / TSA Hazmat Storage	-
305	DPC Fuel Pumps	-
306	DPC Vehicle Maintenance Building	814.9
307	DPC Old Field Maintenance	798.7
308	VBAI Battery Storage/Hazmat	800.6
309	FAA RTDO Equipment Building	-
310	FAA ASR-9	876.1
311	RWY 6L GS & Offset GS Equipment Building	-
312	RWY 24L ALSF LOC Offset Equipment Building	-
313	RWY 6L ALSF Equipment Building	-
314	RWY 24R LOC / RWY 6L ALSF	-
315	RWY 6L GS Equipment Building	-
316	X Center	-
401	Power Substation	-
402	North of Kilo (including EV-10 & CME) West of Pad-3	-
403	EV-10	-
404	DPC Consolidated Maintenance Facility	-
405	DPC Field Maintenance Storage Building	788.5
406	FSS / NOAA Building	791.9
407	UPS	-
408	FAA Precision Runway Monitor	-
409	NOAA Doppler Radar	876.1
410	RWY 24R GS Equipment Building	-
411	RWY 24L LOC Equipment Building	-
501	National / Alamo Rental Car Maintenance	-
502	Hertz Rental Car Maintenance	-
503	Avis Rental Car Maintenance	-
504	Dollar / Thrifty Rental Car Maintenance	-
505	Budget Rental Car Maintenance	-
506	Consolidated Rental Car Facility Main Building	-
507	Enterprise Rental Car Maintenance	-

EXISTING FACILITY TO BE DEMOLISHED/RELOCATED

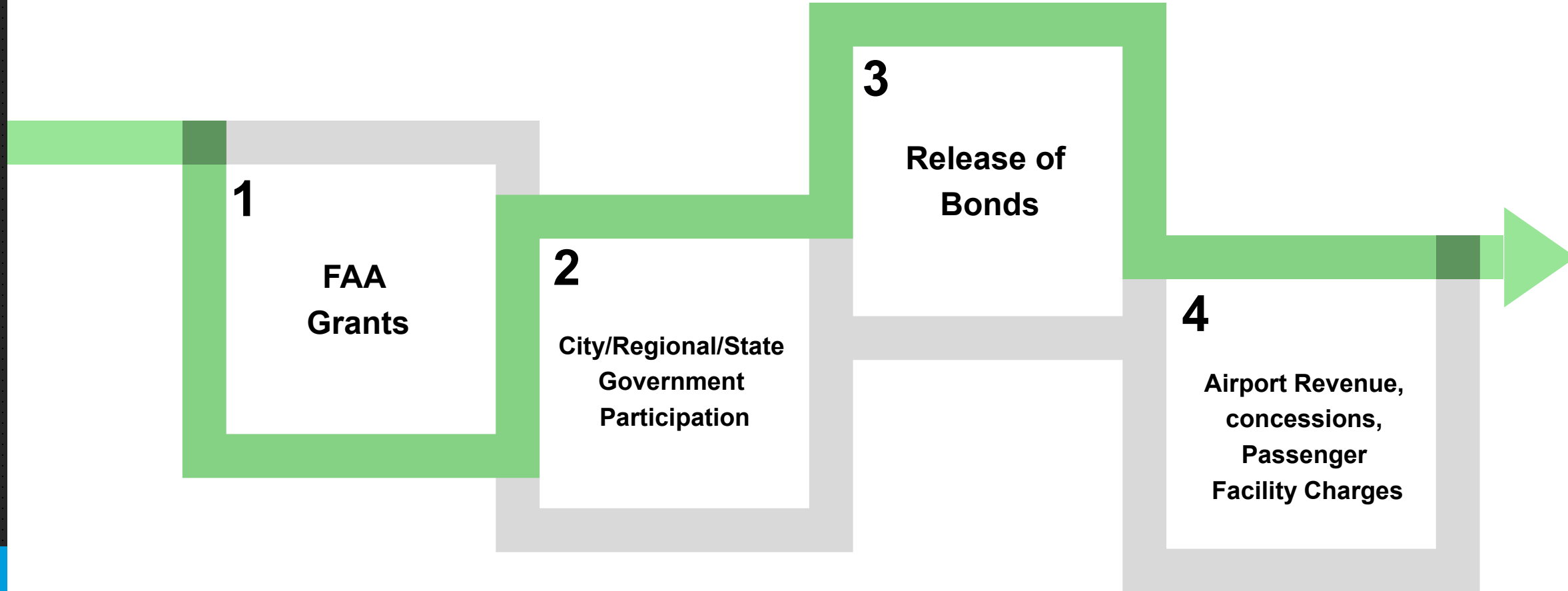
DRAWING LEGEND		
EXISTING	FUTURE	ITEM
STRUCTURES		
[Symbol]	[Symbol]	ON AIRPORT BUILDINGS
[Symbol]	[Symbol]	OFF AIRPORT BUILDINGS
[Symbol]	[Symbol]	SECURITY FENCE
PAVEMENT		
[Symbol]	[Symbol]	AIRFIELD PAVEMENT
[Symbol]	[Symbol]	SERVICE ROAD
[Symbol]	[Symbol]	NON-MOVEMENT/UNIMPROVED PAVEMENT
AIRPORT SAFETY AREAS		
[Symbol]	[Symbol]	RUNWAY PROTECTION ZONE (RPZ)
[Symbol]	[Symbol]	OBJECT FREE AREA (OFA)
[Symbol]	[Symbol]	RUNWAY SAFETY AREA (RSA)
NAVIGATIONAL AIDS		
[Symbol]	[Symbol]	AIRPORT BEACON
[Symbol]	[Symbol]	WIND SOCK
PROPERTY / EASEMENTS		
[Symbol]	[Symbol]	AIRPORT PROPERTY LINE
[Symbol]	[Symbol]	AVIGATION EASEMENT
TRANSPORTATION		
[Symbol]	[Symbol]	RAILROAD
ENVIRONMENT		

PROPOSED AIRPORT FACILITIES		
NO.	FACILITY	TOP ELEV (MSL)
P01	ARRF TRAINING FACILITY	-
P02	CUSTOMS	-
P03	CARGO BUILDING #1	-
P04	CARGO BUILDING #2	-
P05	CARGO BUILDING #3	-
P06	AIRCRAFT MAINTENANCE (SOUTH)	-
P07	AIR SERVICES (SOUTH)	-
P08	AIR SERVICES (NORTH)	-
P09	DEICING/HOLD PAD	-
P10	AIRCRAFT MAINTENANCE (NORTH)	-
P11	DUAL V TAXIWAY	-
P12	DEICING/TRUCK OUTDOOR STORAGE	-
P13	CATERING	-
P14	ATCT	-
P15	SERVICE AIR	-
P16	ATLANTIC AVIATION	-
P17	GA FUEL	-
P18	ISLAND WATERWAYS	-
P19	PARKER HANNIFAN HANGAR #1	-
P20	PARKER HANNIFAN HANGAR #2	-
P21	CORPORATE HANGAR #1	-
P22	CORPORATE HANGAR #2	-
P23	COMMERCIAL FUEL FARM EXPANSION	-
P24	CENTRAL RECEIVING	-



Financial Feasibility Analysis

Identify the financial plan for the airport, describe how the sponsor will finance the projects recommended in the master plan, and demonstrate the financial feasibility of the program.





Funding Master Plan Capital Projects

- AIP eligible grants include improvements related to enhancing airport safety, capacity, security and environmental protection
- AIP grants are used on the airfield projects, not generally used for terminal projects



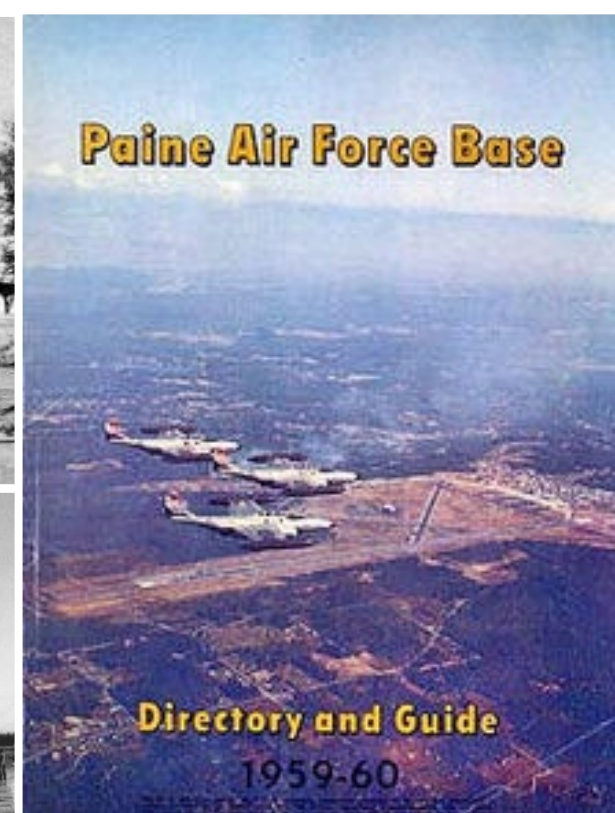
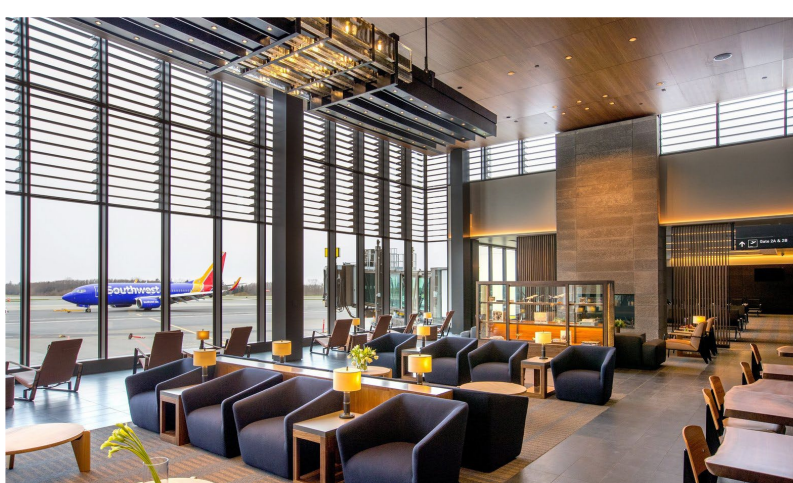
Airport Improvement Program (AIP)



Passenger Facility Charge (PFC)



Tenant rents and fees



What's next for Paine Field?

